# Anupam Dewan

List of Publications by Year
in descending order



| 94 | 1,832 | 394421 | 302126 |
|---|---|---|---|
| papers | citations | 19 h-index | 39 g-index |

| 101 | 101 | 101 | 1317 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Review of passive heat transfer augmentation techniques. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2004, 218, 509-527. | 1.4 | 307 |
| 2 | Recent Trends in Computation of Turbulent Jet Impingement Heat Transfer. Heat Transfer Engineering, 2012, 33, 447-460. | 1.9 | 137 |
| 3 | Parametric studies on a metal hydride based hydrogen storage device. International Journal of Hydrogen Energy, 2007, 32, 4988-4997. | 7.1 | 78 |
| 4 | Comparison of various integration to wall (ITW) RANS models for predicting turbulent slot jet impingement heat transfer. International Journal of Heat and Mass Transfer, 2013, 65, 750-764. | 4.8 | 77 |
| 5 | A review of heat transfer enhancement through flow disruption in a microchannel. Journal of Thermal Science, 2015, 24, 203-214. | 1.9 | 77 |
| 6 | Flow and thermal characteristics of jet impingement: comprehensive review. International Journal of Heat and Technology, 2017, 35, 153-166. | 0.6 | 66 |
| 7 | Heat transfer enhancement by pin elements. International Journal of Heat and Mass Transfer, 2005, 48, 4738-4747. | 4.8 | 61 |
| 8 | Effect of Height and Position of Dams on Inclusion Removal in a Six Strand Tundish. ISIJ International, 2008, 48, 154-160. | 1.4 | 58 |
| 9 | Fluid dynamics and mixing of single-phase flow in a stirred vessel with a grid disc impeller: Experimental and numerical investigations. Chemical Engineering Science, 2006, 61, 2815-2822. | 3.8 | 52 |
| 10 | Computational study of metal hydride cooling system. International Journal of Hydrogen Energy, 2009, 34, 3164-3172. | 7.1 | 52 |
| 11 | Numerical investigation of coupled heat and mass transfer during desorption of hydrogen in metal hydride beds. Energy Conversion and Management, 2009, 50, 69-75. | 9.2 | 50 |
| 12 | Strategy for selection of elements for heat transfer enhancement. International Journal of Heat and Mass Transfer, 2006, 49, 3392-3400. | 4.8 | 42 |
| 13 | Development of a novel thermal model for a PV/T collector and its experimental analysis. Solar Energy, 2019, 188, 631-643. | 6.1 | 39 |
| 14 | Analysis of Non-Darcy Models for Mixed Convection in a Porous Cavity Using a Multigrid Approach. Numerical Heat Transfer; Part A: Applications, 2009, 56, 685-708. | 2.1 | 38 |
| 15 | Tackling Turbulent Flows in Engineering. , 2011, , . | | 38 |
| 16 | URANS computations with buoyancy corrected turbulence models for turbulent thermal plume. International Journal of Heat and Mass Transfer, 2014, 72, 680-689. | 4.8 | 31 |
| 17 | PREDICTION OF TURBULENT PLANE JET IN CROSSFLOW. Numerical Heat Transfer; Part A: Applications, 2002, 41, 101-111. | 2.1 | 30 |
| 18 | Partially Averaged Navier Stokes simulation of turbulent heat transfer from a square cylinder. International Journal of Heat and Mass Transfer, 2015, 89, 251-266. | 4.8 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A review on recent developments in solar distillation units. Sadhana - Academy Proceedings in Engineering Sciences, 2016, 41, 203-223. | 1.3 | 27 |
| 20 | OpenFOAM based LES of slot jet impingement heat transfer at low nozzle to plate spacing using four SGS models. Heat and Mass Transfer, 2019, 55, 911-931. | 2.1 | 26 |
| 21 | Solidification Modeling: Evolution, Benchmarks, Trends in Handling Turbulence, and Future Directions. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2014, 45, 1456-1471. | 2.1 | 21 |
| 22 | A new turbulence model for the axisymmetric plume. Applied Mathematical Modelling, 1997, 21, 709-719. | 4.2 | 19 |
| 23 | Computational prediction of a slightly heated turbulent rectangular jet discharged into a narrow channel crossflow using two different turbulence models. International Journal of Heat and Mass Transfer, 2006, 49, 3914-3928. | 4.8 | 19 |
| 24 | A study of LESâ€“SGS closure models applied to a square buoyant cavity. International Journal of Heat and Mass Transfer, 2016, 98, 164-175. | 4.8 | 18 |
| 25 | A study on thermal characteristics of double-layered microchannel heat sink: Effects of bifurcation and flow configuration. International Journal of Thermal Sciences, 2021, 162, 106791. | 4.9 | 18 |
| 26 | Future projections of temperature and precipitation for Antarctica. Environmental Research Letters, 2022, 17, 014029. | 5.2 | 18 |
| 27 | Flow and heat transfer characteristics in convergent-divergent shaped microchannel with ribs and cavities. International Journal of Heat and Technology, 2017, 35, 863-873. | 0.6 | 17 |
| 28 | Effect of side ratio on fluid flow and heat transfer from rectangular cylinders using the PANS method. International Journal of Heat and Fluid Flow, 2016, 61, 309-322. | 2.4 | 16 |
| 29 | Large Eddy Simulation of Turbulent Slot Jet Impingement Heat Transfer at Small Nozzle-to-Plate Spacing. Heat Transfer Engineering, 2016, 37, 1242-1251. | 1.9 | 16 |
| 30 | Deciphering the flow structure of Czochralski melt using Partially Averaged Navierâ€“Stokes (PANS) method. Sadhana - Academy Proceedings in Engineering Sciences, 2018, 43, 1. | 1.3 | 16 |
| 31 | In the quest of an appropriate turbulence model for analyzing the aerodynamics of a conventional Savonius (S-type) wind rotor. Journal of Renewable and Sustainable Energy, 2021, 13, . | 2.0 | 16 |
| 32 | The effect of fin spacing and material on the performance of a heat sink with circular pin fins. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2010, 224, 35-46. | 1.4 | 15 |
| 33 | LES of a Turbulent Slot Impinging Jet to Predict Fluid Flow and Heat Transfer. Numerical Heat Transfer; Part A: Applications, 2013, 64, 759-776. | 2.1 | 15 |
| 34 | Savonius wind turbines: A review of recent advances in design and performance enhancements. Materials Today: Proceedings, 2021, 47, 2976-2983. | 1.8 | 15 |
| 35 | Flow and thermal characteristics of jet impingement on a flat plate for small nozzle to plate spacing using LES. International Journal of Thermal Sciences, 2019, 145, 106005. | 4.9 | 14 |
| 36 | A PANS study of fluid flow and heat transfer from a square cylinder approaching a plane wall. International Journal of Thermal Sciences, 2017, 120, 321-336. | 4.9 | 13 |

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| 37 | Computational Models for Turbulent Thermal Plumes: Recent Advances and Challenges. Heat Transfer Engineering, 2014, 35, 367-383. | 1.9 | 12 |
| 38 | Performance Optimizations of Grid Disc Impellers for Mixing of Single-Phase Flows in a Stirred Vessel. Chemical Engineering Research and Design, 2006, 84, 691-702. | 5.6 | 11 |
| 39 | Assessment of Buoyancy-Corrected Turbulence Models for Thermal Plumes. Engineering Applications of Computational Fluid Mechanics, 2013, 7, 239-249. | 3.1 | 11 |
| 40 | CFD study of slot jet impingement heat transfer with nanofluids. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 206-220. | 2.1 | 11 |
| 41 | Influence of three-dimensional wake transition on heat transfer from a square cylinder near a moving wall. International Journal of Heat and Mass Transfer, 2020, 148, 118986. | 4.8 | 11 |
| 42 | Computational study on effects of rib height and thickness on heat transfer enhancement in a rib roughened square channel. Sadhana - Academy Proceedings in Engineering Sciences, 2016, 41, 667-678. | 1.3 | 10 |
| 43 | An assessment of streamline curvature effects on the mixing region of a turbulent plane jet in crossflow. Applied Mathematical Modelling, 2005, 29, 711-725. | 4.2 | 9 |
| 44 | Computation of the turbulent plane plume using the kâ€“Ïµâ€“tâ€²2â€“Î³ model. Applied Mathematical Modelling, 2000, 24, 815-826. | 4.2 | 8 |
| 45 | Effect of streamline curvature on flow field of a turbulent plane jet in cross-flow. Mechanics Research Communications, 2007, 34, 241-248. | 1.8 | 8 |
| 46 | Partially-averaged Navierâ€“Stokes method for turbulent thermal plume. Heat and Mass Transfer, 2015, 51, 1655-1667. | 2.1 | 8 |
| 47 | Heat transfer and flow characteristics of turbulent slot jet impingement on plane and ribbed surfaces. Thermophysics and Aeromechanics, 2018, 25, 717-734. | 0.5 | 8 |
| 48 | Three-dimensional wake transitions past a rectangular cylinder placed near a moving wall: Influence of aspect and gap ratios. Ocean Engineering, 2021, 219, 108288. | 4.3 | 8 |
| 49 | Partially-Averaged Navier-Stokes (PANS) approach for study of fluid flow and heat transfer characteristics in Czochralski melt. Journal of Crystal Growth, 2018, 481, 56-64. | 1.5 | 7 |
| 50 | Performance Assessment of Different Turbulence Models for a Dual Jet Flowing Over a Heated Sinusoidal Wavy Surface. Journal of Thermal Science and Engineering Applications, 2022, 14, . | 1.5 | 7 |
| 51 | A note on high Schmidt number laminar bouyant jets discharged horizontally. International Communications in Heat and Mass Transfer, 1992, 19, 721-731. | 5.6 | 6 |
| 52 | An Investigation of Turbulent Rectangular Jet Discharged into a Narrow Channel Weak Crossflow. Journal of Hydrodynamics, 2008, 20, 154-163. | 3.2 | 6 |
| 53 | Feasibility study of installation of MW level grid connected solar photovoltaic power plant for northeastern region of India. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1. | 1.3 | 6 |
| 54 | Influence of wake confinement and buoyancy on flow past a square cylinder. Fluid Dynamics Research, 2019, 51, 035502. | 1.3 | 6 |

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| 55 | A study of thermo-fluid characteristics of Czochralski melt using rotation and curvature corrected Partially-Averaged Navier-Stokes (PANS) turbulence models. International Journal of Thermal Sciences, 2019, 140, 50-58. | 4.9 | 6 |
| 56 | Effects of the Antarctic elevation on the atmospheric circulation. Theoretical and Applied Climatology, 2021, 143, 1487-1499. | 2.8 | 6 |
| 57 | Influence of the height of Antarctic ice sheet on its climate. Polar Science, 2021, 28, 100642. | 1.2 | 6 |
| 58 | Analysis of Interrupted Rectangular Microchannel Heat Sink with High Aspect Ratio. Journal of Applied Fluid Mechanics, 2017, 10, 117-126. | 0.2 | 6 |
| 59 | Assessment of RANS-based turbulence model for forced plume dynamics in a linearly stratified environment. Computers and Fluids, 2022, 235, 105281. | 2.5 | 6 |
| 60 | Investigations of heat transfer and flow characteristics of wall-bounded jets on a sinusoidal wavy surface. International Journal of Thermal Sciences, 2022, 175, 107485. | 4.9 | 6 |
| 61 | A Multigrid-Accelerated Code on Graded Cartesian Meshes for 2D Time-Dependent Incompressible Viscous Flows. Engineering Applications of Computational Fluid Mechanics, 2010, 4, 71-90. | 3.1 | 5 |
| 62 | Influence of gap-ratio on flow dynamics and heat transfer for a square cylinder approaching a moving wall in turbulent regime. International Journal of Heat and Mass Transfer, 2021, 172, 121122. | 4.8 | 5 |
| 63 | Effect of Bifurcation on Thermal Characteristics of Convergent-Divergent Shaped Microchannel. Journal of Thermal Science and Engineering Applications, 2018, 10, . | 1.5 | 4 |
| 64 | Thermal performance study of double-layer microchannel with bifurcation. Thermal Science and Engineering Progress, 2020, 17, 100481. | 2.7 | 4 |
| 65 | A study of turbulent heat transfer in convergent-divergent shaped microchannel with ribs and cavities using CFD. Journal of Mechanical Engineering and Sciences, 2020, 14, 6344-6361. | 0.6 | 4 |
| 66 | Comparison of four turbulence models for wall-bounded flows affected by transverse curvature. AIAA Journal, 1996, 34, 842-844. | 2.6 | 3 |
| 67 | Distribution of Temperature as a Passive Scalar in the Flow Field of a Heated Turbulent Jet in a Crossflow. Numerical Heat Transfer; Part A: Applications, 2008, 54, 67-92. | 2.1 | 3 |
| 68 | A Multigrid-Accelerated Three-Dimensional Transient-Flow Code and its Application to a New Test Problem. Journal of Hydrodynamics, 2010, 22, 838-846. | 3.2 | 3 |
| 69 | Computational analysis of convective heat transfer properties of turbulent slot jet impingement. Engineering Computations, 2021, ahead-of-print, . | 1.4 | 3 |
| 70 | Effects of wake confinement and buoyancy on three-dimensional flow transitions for a square cylinder near a moving wall. Physics of Fluids, 2021, 33, . | 4.0 | 3 |
| 71 | Sophisticated interplay of operating conditions governs flow field transition and optimal conversion inside tangentially fired gasifiers. Energy, 2022, 252, 123975. | 8.8 | 3 |
| 72 | Use of kâ^Îµâ^Î³ Model to Predict Intermittency in Turbulent Boundary-Layers. Journal of Fluids Engineering, Transactions of the ASME, 2000, 122, 542-546. | 1.5 | 2 |

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| 73 | Computational study of coal combustion in an entrained flow furnace. AIP Conference Proceedings, 2019, , . | 0.4 | 2 |
| 74 | Thermofluid Characteristics of Czochralski Melt Convection Using 3D URANS Computations. Journal of Thermal Science and Engineering Applications, 2019, 11, . | 1.5 | 2 |
| 75 | Reynolds-Averaged Navier-Stokes modeling of a turbulent forced plume in a stratified medium. Materials Today: Proceedings, 2021, 47, 3068-3068. | 1.8 | 2 |
| 76 | Impact of the Antarctic topography on meridional energy transport and its consequential effect in the monsoon circulation. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3286-3296. | 2.7 | 2 |
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| 78 | Transient flow and thermal transport characteristics of wall-bounded turbulent dual jet with heated undulated wall. International Journal of Thermal Sciences, 2022, 182, 107800. | 4.9 | 2 |
| 79 | Comparison of three buoyancy extended versions of the kâ€“Ïµâ€“tâ€²2 model in predicting turbulent plane plume. Applied Mathematical Modelling, 2004, 28, 241-254. | 4.2 | 1 |
| 80 | Models Based on Boussinesq Approximation. , 2011, , 49-57. | | 1 |
| 81 | Study of convective heat transfer in turbulent jet impingement using SAS and LES modelling. AIP Conference Proceedings, 2019, , . | 0.4 | 1 |
| 82 | Computational study of non-reactive swirling flow in tangentially-fired configuration gasifier. Materials Today: Proceedings, 2020, 28, 2053-2056. | 1.8 | 1 |
| 83 | Response of the Atmosphere to Orographic Forcings: Insight from Idealised Simulations. Journals of the Atmospheric Sciences, 2021, , . | 1.7 | 1 |
| 84 | Fluid Turbulence. , 2011, , 19-29. | | 1 |
| 85 | A Comparison of Tapered and Straight Circular Pin-Fin Compact Heat Exchangers for Electronic Appliances. Journal of Enhanced Heat Transfer, 2009, 16, 301-314. | 1.1 | 1 |
| 86 | Some Case Studies. , 2011, , 105-115. | | 1 |
| 87 | Study of Heat Transfer over a Square Cylinder in Cross Flow using Variable Resolution Modeling. Journal of Applied Fluid Mechanics, 2016, 9, 1367-1379. | 0.2 | 1 |
| 88 | Numerical Study of Three-Dimensional Jets Using Point Source Method. International Journal of Turbo and Jet Engines, 2005, 22, . | 0.7 | 0 |
| 89 | Assessment of Characteristics of Phase Change Region during Solidification of a Binary Alloy in Different Flow Regimes. Materials Today: Proceedings, 2017, 4, 9445-9449. | 1.8 | 0 |
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| 91 | Reynolds-Stress and Scalar Flux Transport Model. , 2011, , 81-89. | | 0 |
| 92 | Characteristics of Some Important Turbulent Flows. , 2011, , 31-42. | | 0 |
| 93 | Solidification with Buoyancy Induced Convection: Evaluation of Different Mushy Zone Formulations. Proceedings of the Indian National Science Academy, 2016, . | 1.4 | 0 |
| 94 | Potential effects of the projected Antarctic sea-ice loss on the climate system. Climate Dynamics, 0, , . | 3.8 | 0 |